SEQUENCE LISTING

<110> Szostak, Jack W.

Roberts, Richard W.

Liu, Rihe	
<120> SELECTION OF PROTEINS USING RNA-PROTEIN FUSIONS	
<130> 00786/350005	
<140> 09/247,190	
<141> 1999-02-09	
<150> 60/035,963	
<151> 1997-01-21	
<150> 60/064,491	
<151> 1997-11-06	
<150> 09/007,005	
<151> 1998-01-14	
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Glu Gln Lys Leu Ile Ser Glu Glu Asp Leu	
1 5 10	
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<400> 3
gggacaauua cuauuuacaa uuacaauggc ugaagaacag aaacugaucu cugaagaaga
                                                                  60
ccugcugcgu aaacgucgug aacagcugaa acacaaacug gaacagcugc guaacucuug
                                                                 120
cgcuaaaaaa aaaaaaaaa acc
                                                                 153
<210> 4
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<223> Random peptide
<221> VARIANT
<222> (1) ... (27)
<223> Xaa is any amino acid.
<221> VARIANT
<222> (1)...(34)
<223> Xaa = Any Amino Acid
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10
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Gln Leu Arg Asn Ser
                                                30
           20
                              25
Cys Ala
<210> 5
<211> 25
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<213> Tobacco Mosaic Virus
<400> 5
                                                                  25
gggacaauua cuauuuacaa uuaca
<210> 6
<211> 10
<212> RNA
<213> Escherichia coli
<400> 6
                                                                  10
ggaggacgaa
```

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<210> 7
<211> 34
<212> PRT
<213> Homo sapiens
<400> 7
Met Ala Glu Glu Gln Lys Leu Ile Ser Glu Glu Asp Leu Leu Arg Lys
                                    10
Arg Arg Glu Gln Lys Leu Lys His Lys Leu Glu Gln Leu Arg Asn Ser
                                25
Cys Ala
<210> 8
<211> 29
<212> DNA
<213> Artificial Sequence
<223> Translation template
<400> 8
                                                                         29
aaaaaaaaa aaaaaaaaa aaaaaaacc
<210> 9
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<212>_DNA__
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 <223> Translation template
 <400> 9
                                                                         12
 aaaaaaaaa cc
 <210> 10
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 <212> DNA
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 <223> Translation template
 <400> 10
                                                                          24
 cgcggttttt atttttttt ttcc
 <210> 11
 <211> 42
 <212> RNA
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<213> Artificial Sequence

<220>		
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ggaggacgaa augaaaaaaa aaaaaaaaaa aaaaaaaaaa	•	42
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<213> Artificial Sequence		
Carry Indiana columns		
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<400> 12		
ggaggacgaa cugaaaaaaa aaaaaaaaa aaaaaaaaa cc		42
<210> 13		
<211> 42		
<212> RNA	•	
<213> Artificial Sequence	•	·
<220>		
<223> Translation template		
<400> 13 ggaggacgaa augaaaaaaa aaaaaaaaa aaaaaaaa cc		42
ggaggacgaa augaaaaaaa aaaaaaaaa aaaaaaaa co	•	
<210> 14	•	
<211> 36		
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ggaggacgaa cugaaaaaaa aaaaaaaaaa aaaacc		36
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ggaggacgaa cugaaaaaaa aaaaaaaaaa acc		23

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ggaggacgaa cugaaaaaaa aaaaaaaacc
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<223> Translation template
<221> misc feature
<222> (1) ... (289)
\langle 223 \rangle n = A,T,C or G
<400> 17
gggacaauua cuauuuacaa uuacaaugnn snnsnnsnns nnsnnsnnsn nsnnsnnsnn
                                                                    60
120
                                                                   159
cucuuqcqcu aaaaaaaaa aaaaaaaaa aaaaaaacc
<210> 18
<211> 64
<212> DNA
<213> Homo sapiens
<400> 18
gttcaggtct tcttgagaga tcagtttctg ttccatttcg tcctccctat agtgagtcgt
                                                                    60
                                                                    64
atta
<210> 19
<211> 18
<212> DNA
<213> Homo sapiens
<400> 19
                                                                     18
taatacgact cactatag
<210> 20
<211> 12
<212> PRT
<213> Homo sapiens
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<400> 20

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Met Glu Gln Lys Leu Ile Ser Glu Glu Asp Leu Asn
                 5
<210> 21
<211> 99
<212> DNA
<213> Homo sapiens
<400> 21
agcgcaagag ttacgcagct gttccagttt gtgtttcagc tgttcacgac gtttacgcag
                                                                         60
caggtcttct tcagagatca gtttctgttc ttcagccat
                                                                         99
<210> 22
<211> 21
<212> DNA
<213> Homo sapiens
<400> 22
                                                                         21
agcgcaagag ttacgcagct g
<210> 23
<211> 63
<212> DNA
<213> Homo sapiens
<400> 23
taatacgact cactataggg acaattacta tttacaatta caatggctga agaacagaaa
                                                                          60
                                                                          63
 <210> 24
 <211> 33
 <212> PRT
 <213> Homo sapiens
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 Met Ala Glu Glu Gln Lys Leu Ile Ser Glu Glu Asp Leu Leu Arg Lys
 Arg Arg Glu Gln Leu Lys His Lys Leu Glu Gln Leu Arg Asn Ser Cys
                                                      30
                                  25
 Ala
 <210> 25
 <211> 127
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Primers for RNA pool
 <223> n = a, t, c, or g. s = g or c.
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<210> 26 <211> 42 <212> DNA <213> Arti	ficial Sequ	ence				
<220> <223> Prim	ers for RNA	pool			•	
<400> 26						
taatacgact	cactataggg	acaattacta	tttacaatta	ca		42
<210> 27						
<211> 21					•	
<212> DNA						
<213> Arti	ficial Sequ	ence				
<220>						
	ers for RNA	pool				
					•	
<400> 27						•
	, ttacgcagct	g				21
<210> 28						
<211> 28						
<212> DNA						
	ficial Sequ	ience		·		
<220>						
<223> DNA	splint					•
	_					
<400> 28						19
tttttttt	agcgcaaga					
<210> 29		a*				
<211> 18						
<212> DNA						
<213> Home	o sapiens					
<400> 29						÷
gtggtattt	g tgagccag					18
<210> 30						
<211> 40						
<212> DNA						
<213> Pha						

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<400> 30
taatacgact cactataggg acacttgctt ttgacacaac
                                                             40
<210> 31
<211> 20
<212> DNA
<213> Artificial Sequence
<220>
<223> DNA splint
<400> 31
                                                             20
ttttttttt gtggtatttg
<210> 32
<211> 124
<212> RNA
<213> Homo sapiens
<400> 32
gggacaauua cuauuuacaa uuacaauggc ugaagaacag aaacugaucu cugaagaaga
                                                              60
ccugcugcgu aaacgucgug aacagcugaa acacaaacug gaacagcugc guaacucuug
                                                             120
                                                             124
cgcu
<210> 33
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<212> DNA
<213> Artificial Sequence
<220>
<223> DNA splint
<223> n = a, t, c, or g.
<400> 33
                                                              20
tttttttt nagcgcaaga
<210> 34
<211> 123
<212> DNA
<213> Homo sapiens
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\langle 223 \rangle n = a, g, t, or c. s = c or g.
<400> 34
60
120
                                                              123
cat
```

<210> 35

```
<211> 21
<212> DNA
<213> Homo sapiens
<400> 35
                                                                         21
agcttttggt gcttgtgcat c
<210> 36
<211> 63
<212> DNA
<213> Homo sapiens
<400> 36
taatacgact cactataggg acaattacta tttacaatta caatggtgag caagggcgag
                                                                         60
                                                                         63
<210> 37
<211> 26
<212> DNA
<213> Artificial Sequence
<220>
<223> DNA splint
<223> n = a, t, c, or g.
<400> 37
                                                                          26
ttttttttt nagcttttgg tgcttg
<210> 38
<211> 10
<212> PRT
<213> Artificial Sequence
 <220>
 <223> Consensus my c epitope
 <223> Xaa at 2 is Gln or Glu; Xaa at 10 is Leu or Met;
       Xaa in all other positions can be any amino acid.
 <400> 38
 Xaa Xaa Xaa Leu Ile Ser Glu Xaa Xaa Xaa
                                      10
```